Santa Clara County Flood Control
and Water District

Annual Financial Analysis

Water Utility System

February 1973

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WATER DISTRICT

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DONALD K. CURRLIN GENERAL MANAGER

February 13, 1973

The Board of Directors
Santa Clara County Flood
 Control and Water District
5750 Almaden Expressway
San Jose, California 95118

Gentlemen:

I am pleased to transmit to you the second Annual Financial Analysis of the District's Water Utility System. This report was prepared under the authority of Section 26.5 of the District Act. Its purpose is to furnish information describing the physical and financial status of the System and to present recommendations in accordance with the provisions of said Act.

Based on the results of the analyses performed, the report recommends that the District continue to levy groundwater charges on all water extracted from the groundwater basin within the District's Zones W-2, W-3.1, W-3.2 and W-3.3, during the fiscal year 1973-74. It is further recommended that the amount of the charges be established at $30.00 per acre-foot for water extracted for non-agricultural purposes and $8.00 per acre-foot for water extracted for agricultural purposes. I concur with the recommendations presented in this report.

Very truly yours,

Donald K. Currlin

General Manager

SANTA CLARA COUNTY

FLOOD CONTROL AND WATER DISTRICT

ANNUAL FINANCIAL ANALYSIS
WATER UTILITY SYSTEM

by
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Assistant Civil Engineer

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David K. Gill
Senior Civil Engineer
Program Evaluation Division

Jack Watkins, Jr.
Advanced Planning Manager

February 1973

DONALD K. CURRLIN General Manager	LLOYD C. FOWLER Director of Engineering

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INTRODUCTION

This report, the second in a series of annual reports covering the District's activities in protecting and augmenting the water supplies of the District, has been prepared as required by Section 26.5 of the District Act. The purpose of the report is to provide information as to the present and future water requirements of the District, the water supply available, future capital improvement and maintenance and operating requirements, together with a method of financing such requirements and a financial analysis of the District's water utility system. The report shall also contain a recommendation as to whether or not a groundwater charge should be levied in any zone or zones of the District during the ensuing year, and a proposal for the rate of such charges, if any, for agricultural and non-agricultural water.

WATER UTILITY FINANCING

Water Utility Income. The District's taxation and pricing program, described in the 1972 report, is designed to relate the various charges and ad valorem taxes to benefit received from the District's Water Utility System. Basically, the policy incorporates a "pooling" concept for both the water resources of the county and those local facilities required for overall water management, isolating only those costs which relate to separable benefits. This results in four water or tax rates associated with particular benefits, plus a treated water surcharge which may be changed to reflect the changing economic relationship between groundwater pumping costs and the cost of treated water.

Water Utility Expenses. Operation and maintenance expenses, generally classified as operating expenses, are divided into five classes or cost centers. Other expenses include the repayment of bond principal and interest (debt service) and the tax refund to those cities purchasing water from the Hetch-Hetchy Aqueduct (In-County credit). A summary of the revenues and expenses of the District's Water Utility Enterprise for the past three years is shown in Table 1. Table 2 shows the anticipated expenditures and revenues for fiscal year 1972-73 while Table 3 shows these anticipated expenditures and revenues for fiscal year 1972-73 in a format consistent with the pricing policy.

TABLE 1

SUMMARY OF ACTUAL REVENUES AND EXPENDITURES
1969-70 through 1971-72

	1969-70	1970-71	1971-72
I. Revenues:			
Water Charges:			
Groundwater	3,906,265	3,787,784	4,010,239
Surface Water	93,891	107,098	123,747
Treated Water(1)	1,945,034	2,291,375	2,613,636
TOTAL	5,945,190	6,186,257	6,747,622
Non-Operating Revenues:			
Taxes	1,263,193 (2)	1,873,513 (3)	2,425,694
Interest on Investment	384,709	327,030	323,942
Other	68,927	69,587	131,577
TOTAL	1,716,829	2,270,130	2,881,213
TOTAL REVENUES (4)	7,662,019	8,456,387	9,628,835
II. Expenses:			
Operating Expenses:			
Source of Supply	2,991,956	2,768,264	3,372,134
Raw Water T&D	796,755	829,412	1,160,792
Water Treatment	739,537	829,165	1,030,595
Treated Water T&D	153,262	230,188	461,339
General & Admin.	376,783	400,371	519,525
TOTAL	5,058,293	5,057,400	6,544,385
Non-Operating Expenses:			
Debt Service	2,238,805	2,155,074	2,488,548 (5)
In-County Credit	169,905	255,130	278,691
TOTAL	2,408,710	2,410,204	2,767,239
TOTAL EXPENSES	7,467,003	7,467,604	9,311,624
Excess of Revenue over Expenses	195,016	988,783	317,211

(1) Includes groundwater charge, treatment and distribution charge or treated water surcharge (1971-72) and represents total of contract amounts and surplus water.

(2) Includes 5-cent county-wide tax revenue and revenue from a 37-cent tax on land only in Zone W-3 (portion of former conservation District south of Metcalf Road).

(3) Includes 5-cent county-wide tax revenue, revenue from a 2.1-cent tax in Zone W-1 and the revenue from a 37-cent tax in Zone W-3.

(4) Excludes revenue from bond sales.

(5) Includes $343,638 for bond refunding.

TABLE 2

SUMMARY OF ANTICIPATED REVENUES AND EXPENDITURES
1972-73

I.	Revenues:		
	Water Charges:		
	Groundwater	4,068,000	
	Surface Water	123,250	
	Treated Water (1)	2,863,500	
	TOTAL	7,054,750	
	Nonoperating Revenues:		
	Taxes (2)	2,808,879	(3)
	Interest on Investments	255,500	
	Other	214,793	
	TOTAL	3,279,172	
	TOTAL REVENUES	10,333,922	
II.	Expenses:		
	Operating Expenses:		
	Source of Supply	4,200,785	(3)
	Raw Water T & D	2,137,529	
	Water Treatment	1,165,243	
	Treated Water T & D	322,992	
	General and Admin.	687,183	
	TOTAL	8,513,732	
	Nonoperating Expenses:		
	Debt Service	1,502,499	
	In-County Credit	342,464	(3)
	TOTAL	1,844,963	
	TOTAL EXPENSES	10,358,695	
Excess of Revenue over Expenses		-24,773	

(1) Includes both basic user charge and treated water surcharge.

(2) Includes 6.7-cent county-wide tax revenue, revenue from a 1.7-cent tax in Service Area Tax Zone (Zone W-1) and the revenue from a 37-cent tax in Zone W-3.

(3) Values different from budgeted amounts as a result of information made available after printing of budget.

TABLE 3

SUMMARY OF ANTICIPATED EXPENDITURES AND ESTIMATED REVENUES
1972-73

	County-Wide Tax	Service Area Tax	Basic User Charge	Flood Control Zone Taxes			
Expenditures				N/W Zone	C Zone	E Zone	Total
Capital Cost-Import Facilities							
South Bay Aqueduct	1,688,445						
Hetch-Hetchy Aqueduct (Rebate)	342,464						
Recreation Benefit (Allocated)	124,021						
Flood Control Benefit (Allocated)				2,576	41,004	15,080	
Water Purchases-Import Facilities			507,767				
Operation & Maintenance - Import Facilities			708,235				
Operation & Maintenance - Local Facilities			4,955,314				
Capital Cost-Local Facilities		283,813	1,218,686				
Basin Replenishment		471,290					
TOTAL EXPENDITURES	2,154,930	755,103	7,390,002	2,576	41,004	15,080	10,358,695
Revenues							
Treated Water Surcharge Revenue			1,214,500				
M&I Ground & Surface Water Charges and County-Wide and Zone Taxes (ex. Zone W-3)	2,222,000	501,000	5,466,000	2,576	41,004	15,080	
Other Revenue*			871,762				
TOTAL REVENUE	2,222,000	501,000	7,552,262	2,576	41,004	15,080	10,333,922
EXCESS OF REVENUE OVER EXPENSES	67,070	(254,103)	162,260	-	-	-	(24,773)

* Includes Agricultural Groundwater charges, Surface Water charges, Income on Investments, Zone W-3 tax revenue and other income.

WATER REQUIREMENTS

Any proposed schedule of future capital improvements for the District's Water Utility System must logically be based on an analysis of past and present water demands, a projection of the magnitude and geographical distribution of future water demands and an analysis of the present and future sources of supply necessary to meet the overall water requirements of Santa Clara County. Such studies and analyses were performed for the North Santa Clara County area during the 1970-71 fiscal year and will be summarized here. A major study of the central and southern portions of the county was completed in 1972. However, since it appears that supplemental water will not be required in this area for some years and the area financially participates in the District's present water programs only through the county-wide tax, the ad valorem tax in Zone W-3, and groundwater charges in several small sub-zones within Zone W-3, this report will consider only the North County area, or Santa Clara Valley Groundwater Basin.

The District has compiled reasonably accurate records of the water use in the North County since 1964 when the groundwater charge was instituted. While the period of available records is relatively short, it is sufficient to indicate trends and has been used as a basis for determining unit use factors

factors for future years. Table 4 shows the recorded agricultural, non-agricultural and total water use for each year during the period from 1964-65 through 1971-72. Figure 1 shows this total water demand graphically, together with the expected demand during the next twenty years. Following is a brief discussion of the various water demand components shown in Figure 1.

Agricultural Water. Agricultural use of both groundwater and surface water is expected to decline to less than one-half of the present use during the next 20 years. This is primarily because of the expansion of the urban areas and the increasingly unfavorable economic position of agriculture in northern Santa Clara County. It will be noted that the recorded water use exhibits a great deal of variability since agricultural water use is extremely sensitive to both the amount and seasonal distribution of rainfall. For projection purposes the demands are based on "average" or "normal" conditions.

Non-agricultural Groundwater. The use of the underground basin to supply non-agricultural water has varied since 1964-65, although it is not as sensitive to rainfall variations as is agricultural use. Referring to Table 4 it will be noted that non-agricultural use of groundwater generally increased until 1969-70 when a significant decrease occurred as a result of the District's surplus water program. Under this program the

District's treated water contractors obtained additional treated water - over and above their contract amounts - at a substantially reduced price. Sales of surplus water amounted to approximately 20,000 acre-feet in both 1969-70 and 1970-71, and 18,489 acre-feet in 1971-72. Projections of future use of the groundwater basin for supplying municipal and industrial water did not consider the availability of surplus treated water because of its varying and temporary nature. Rather, it was assumed that pumping would continue at a rate of about 145,000 acre-feet per year, the approximate rate of pumping that would have occurred during 1969-70 and 1970-71, had the surplus water program not been available.

Non-agricultural Surface Water. Surface diversions of local water for non-agricultural purposes, consisting primarily of San Jose Water Works diversions in the Los Gatos Creek watershed, were assumed to continue at an average level of 13,000 acre-feet per year based on recent recorded information.

Hetch Hetchy Water. Deliveries of water from the City and County of San Francisco's Hetch Hetchy Aqueduct are expected to continue to increase, even though temporary reductions may be experienced by those contracting cities who also choose to contract for a supply of treated water from this District. The increase in deliveries was assumed to continue beyond the expiration of the present contracts.

District Treated Water. Deliveries of District treated water are contracted for specific quantities through 1976-77 and are expected to continue to increase throughout the period studied.

It must be noted here that these future water requirements are the District's present best estimates. Changing future conditions may alter the projected requirements with a resultant change in the schedule of construction of future facilities. For example, the 1970 census data indicated a reduced rate of growth in the county during the late 1960's in comparison with that experienced during the early 1960's. This fact has been considered in estimating future water demands, although the actual growth may differ from that assumed in the analyses.

TABLE 4

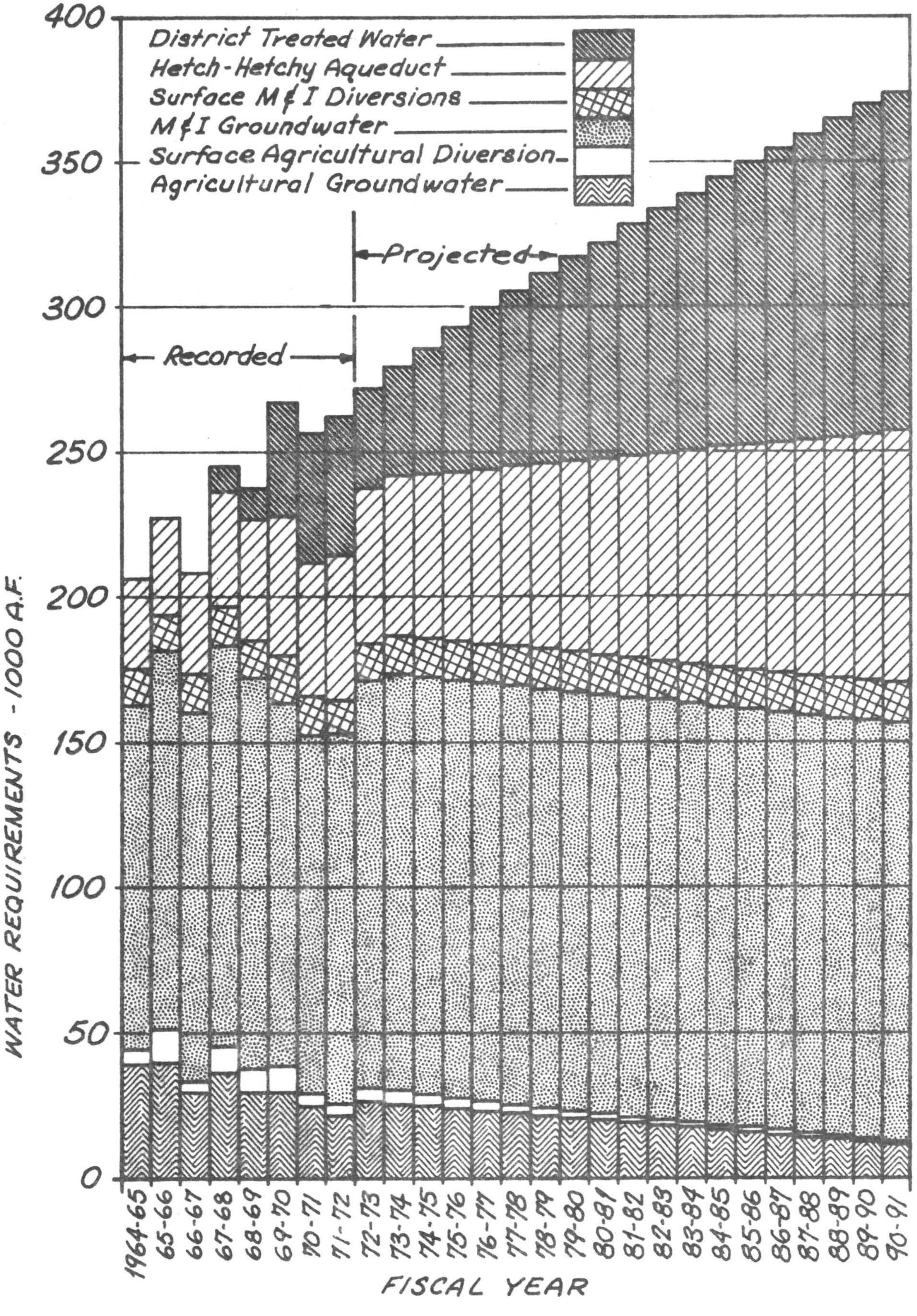
RECORDED NORTH COUNTY WATER USE

Fiscal Year	Agricultural Water Use			Municipal and Industrial Water Use					Total Water Use
	Ground-water	Surface Water	Total	Ground-water	Treated Water	Hetch Hetchy Aqueduct Deliveries	Other Surface Water*	Total	
1964-65	37,935	5,593	43,528	119,618	--	29,536	12,991	162,145	205,673
1965-66	38,463	11,597	50,060	130,786	--	33,572	12,434	176,792	226,852
1966-67	28,863	3,447	32,310	127,550	--	35,784	12,795	176,129	208,439
1967-68	35,470	9,115	44,585	138,285	8,151	39,902	13,863	200,201	244,786
1968-69	28,501	8,305	36,806	135,058	11,446	41,675	12,881	201,060	237,866
1969-70	29,092	8,835	37,927	125,937	39,168	47,203	16,833	229,141	267,068
1970-71	23,689	4,686	28,375	124,156	44,377	45,288	14,113	227,934	256,309
1971-72	21,358	4,065	25,423	127,979	48,837	49,744	10,730	218,759	244,182

*Includes Diversion by San Jose Water Works and Surface Delivery of Untreated M&I Water by District

FIGURE 1

NORTH COUNTY WATER REQUIREMENTS



WATER SUPPLY

Present Water Supply. North Santa Clara County presently draws upon three sources of water: the local supply, the South Bay Aqueduct and the Hetch Hetchy Aqueduct. The local supply is utilized both through groundwater pumpage and surface diversions as is the supply from the South Bay Aqueduct (a portion of this supply being used for groundwater recharge). The supply from the Hetch Hetchy Aqueduct is utilized solely through surface diversions or deliveries.

During the years prior to 1961, the local supply was the only significant source of water for Santa Clara County being utilized almost exclusively through groundwater pumpage. As the demand continued to increase and a branch of the Hetch Hetchy Aqueduct was constructed through Santa Clara County, several of the North-County cities entered into contracts with the City of San Francisco for delivery of supplemental water. In order to accommodate the demand for supplemental water of other areas, this District entered into a contract for a supply from the State of California's South Bay Aqueduct. This contract originally provided for a delivery of 88,000 acre-feet per year but was later amended to provide for a delivery of 100,000 acre-feet per year beginning in 1994.

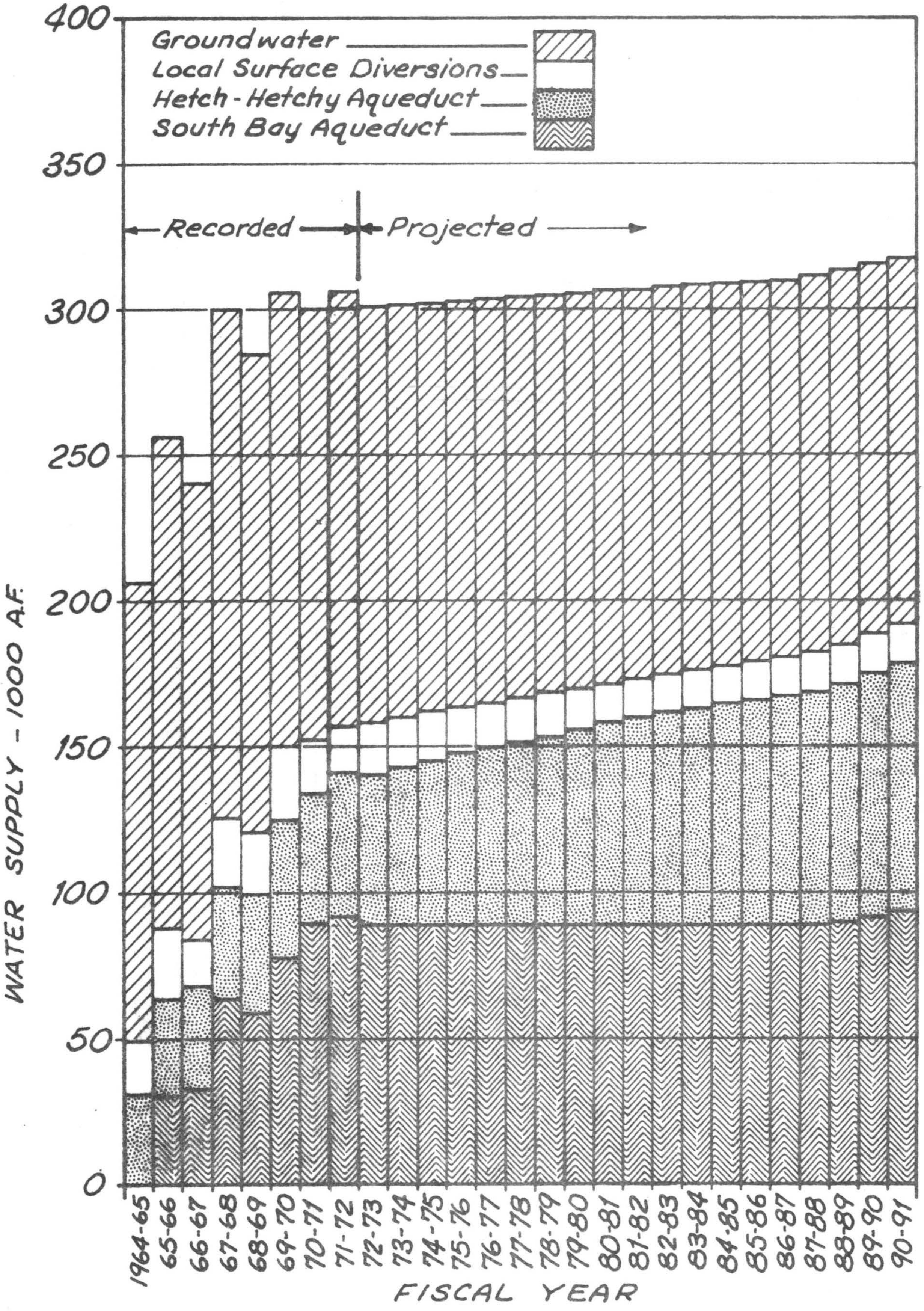
Figure 2 graphically depicts the various components of the water supply presently available to North Santa Clara County. The District's South Bay Aqueduct past deliveries and future entitlements are shown as the base of the graph. To this is added the projected deliveries from the Hetch Hetchy Aqueduct which are equal to that shown on Figure 1, Water Requirements. The local supply as shown is separated into surface supply (matching the agricultural and non-agricultural requirements shown in Figure 1, and groundwater supply). The groundwater supply indicated is based on an estimate of the safe yield of the groundwater basin without the recharge of imported water, i.e., it reflects only natural recharge and artificial recharge of locally conserved water using the District's present system and operating criteria.

Future Water Requirements. A comparison of the water requirements shown in Figure 1 and the available water supply shown in Figure 2 indicates the need for additional supplemental water during the latter part of this decade. Provided additional sources become available, it is probable that the yield of the groundwater basin could be significantly increased through the development of additional off-stream percolation facilities.

At the present time, the primary additional source of water necessary to meet the County's increasing requirements is expected to be the San Felipe Division of the U. S. Bureau of Reclamation Central Valley Project. This project, which has been authorized by Congress, is not expected to be completed until the early 1980's. When completed, however, it will ensure an adequate supply of supplemental water for all of Santa Clara County for the foreseeable future.

A study on the use of reclaimed waste water as a possible source of additional water is being prepared for the District by the joint venture of Consoer-Bechtel. A third source for additional water under study is the conservation of additional local stream flow.

FIGURE 2
NORTH COUNTY WATER SUPPLY



CAPITAL IMPROVEMENT PROGRAM

The projected growth of North Santa Clara County, and its requirements for water supply, clearly establishes the general need for additional supplemental water and additional facilities in the District's Water Utility System. System expansion will include facilities to provide storage, conservation, treatment and distribution of local and imported water supplies. Although growth is imminent, its rate and pattern cannot be precisely predicted. Therefore, the District's program is formulated to provide maximum flexibility for accomodating variations in demand as well as source of supply.

Full Construction Program. Table 5 presents these additional facilities which previous investigations have indicated will be required during the period 1971-72 through 1980-81. The tabulation notes the assumed period of construction and estimated capital cost of each facility. Included is the construction of a water treatment and distribution system serving the eastern part of the North County area. This system would ultimately consist of the Penitencia Water Treatment Plant, Evergreen Pipeline, Evergreen Reservoir, and Milpitas Pipeline. Also included are a treated water pipeline to serve the City of Mountain View, a connection with the Hetch Hetchy Aqueduct in Milpitas to provide for emergency water service, the pur-

purchase of land for and initial development of off-stream groundwater recharge areas, and expansions of both Penitencia and Rinconada water treatment plants as required to meet the demand for surface delivered treated water. The purchase of land for additional off-stream groundwater recharge ponds has been scheduled for the period 1971-72 through 1975-76, a period during which satisfactory sites are expected to remain available.

Table 6 indicates the tax rates and water charges required, together with the reserves developed from the revenue from a $35 per acre-foot treated water surcharge, assuming that the construction of those projects listed in Table 4 is financed from bond sales. Table 7 shows a further breakdown of the components of the County-wide and Service Area Taxes. As shown in the last column of Table 6, the treated water surcharge develops a reserve of $9,101,000 through 1975-76, a reserve that accumulates to $20,914,000 by the end of 1980-81. This reserve could be applied to reduce the Basic User Charge and/or the Service Area Tax. Such an application of the total reserve would permit reduction of the groundwater charge to $30.00 per acre-foot, the present legal limit, and elimination of the Service Area Tax for the period 1973-74 through 1980-81. Such an application would, however, also eliminate all of the cumulative reserve.

Table 8 depicts the deficit accumulated on the assumption that the Service Area Tax Rate and the Basic User Charge are set at the current rates for 10 years, the County-wide tax is limited to its current rate, a portion of the additional facilities are constructed from the presently available bond funds, and the remaining facilities are constructed from current revenues. As shown, a cumulative deficit of $6,346,000 is experienced through 1980-81. Coupled with an estimated surplus of $4,339,000 at the end of 1972-73, this reflects a cash expenditure in excess of revenues of $10,685,000 during the period 1973-74 through 1980-81. Recovery of this amount would require an increase in the Basic User Charge to $36.13 per acre-foot for the period 1973-74 through 1980-81 or a lesser increase in the Basic User Charge plus an increase in the Service Area Tax rate.

Reduced Construction Program. Table 10 shows the effect of reducing the expenditures by eliminating from the construction schedule the development of the land purchased for additional off-stream recharge ponds and the expansion of Rinconada Water Treatment Plant. This reduced construction schedule is shown in Table 9. While such a reduced construction schedule does approximately balance, within the accuracy of the cost estimates, the expenditures against the sum of the revenues and the initial cash reserves and holds both the Service Area Tax rate and the Basic User Charge at the present rates, it does not provide for the logical and necessary expansion of the water utility system.

Summary of Analyses. In summary, while it is apparent from the tables that the District can continue its present tax rates and the $30.00 per acre-foot Basic User Charge through 1975-76, or through the current 5-year rate period, construction of all necessary additional facilities during the following rate period, 1976-77 through 1980-81, will require either the approval of additional bonds or an increase in rates.

TABLE 5

SUMMARY OF CAPITAL IMPROVEMENTS
-Full Construction Program

Facility	Construction Period	Estimated Capital Cost*
Percolation Facilities		
Land Acquisition	1972-73 through 1975-76	$ 2,029,000
Development	1976-77 through 1980-81	1,678,000
Penitencia Water Treatment Plant	1971-72 through 1973-74	5,271,000
Evergreen Pipeline	1971-72 through 1973-74	3,771,000
Mountain View Distributary	1973-74	447,000
Evergreen Pipeline Extension and Evergreen Reservoir	1976-77	2,807,000
Milpitas Pipeline	1976-77	1,533,000
Hetch-Hetchy Aqueduct Connection	1976-77	1,014,000
Penitencia WTP Expansion	1976-77 through 1977-78	3,978,000
Rinconada WTP Expansion	1978-79 through 1979-80	4,369,000
		$ 26,897,000

* Adjusted to date of construction.

TABLE 6

SUMMARY OF REQUIRED TAX RATES, WATER CHARGES AND RESERVE BALANCE
-Full Construction Program Financed From Bonds
-Treated Water Surcharge at $35 Per Acre-Foot

				Flood Control Zone Taxes				
Year	County-Wide Tax ($/$100)	Service Area Tax ($/$100)	Basic User Charge ($/$100)	NW Zone ($/$100)	C Zone ($/$100)	E Zone ($/$100)	Annual Construction Reserve ($)	Cumulative Construction Reserve ($)
1971-72	.0670*	.0170*	30.00*	.0002	.0023	.0027	317,000	4,364,000
1972-73	.0690*	.0170*	30.00*	.0002	.0041	.0030	-25,000	4,339,000
1973-74	.0689	.0184	29.28	.0004	.0018	.0031	1,337,000	5,676,000
1974-75	.0566	.0312	33.10	.0004	.0016	.0027	1,630,000	7,306,000
1975-76	.0504	.0256	34.21	.0003	.0017	.0012	1,795,000	9,101,000
3-Year Average≠	.0585	.0268	32.27	.0003	.0022	.0025		
1976-77	.0490	.0210	35.06	.0003	.0016	.0011	1,956,000	11,057,000
1977-78	.0479	.0173	37.80	.0004	.0014	.0012	2,166,000	13,223,000
1978-79	.0461	.0195	40.45	.0006	.0013	.0011	2,383,000	15,606,000
1979-80	.0448	.0168	41.68	.0005	.0014	.0011	2,565,000	18,171,000
1980-81	.0445	.0243	43.98	.0005	.0013	.0011	2,743,000	20,914,000
5-Year Average	.0465	.0198	39.91	.0005	.0016	.0011		

*Actual rates for 1971-72 and 1972-73
≠Excludes 1971-72, 1972-73

TABLE 7

COMPONENTS OF COUNTY-WIDE AND SERVICE AREA TAX
-Full Construction Program Financed From Bonds
-No Reduction From Treated Water Surcharge

YEAR	COUNTY-WIDE TAX							SERVICE AREA TAX				
	State & Federal Facilities Capital Cost		Hetch-Hetchy Facilities Capital Cost (Rebate)		Recreation Benefit			Local Facilities Excess Capacity		Basin Replenishment		
	Cost ($1000)	Related Tax Rate	Cost ($1000)	Related Tax Rate	Cost ($1000)	Related Tax Rate	Total Tax Rate	Cost ($1000)	Related Tax Rate	Cost ($1000)	Related Tax Rate	Total Tax Rate
1971-72	1,505	0.0518	264	0.0091	80	0.0027	0.0636(1)	497	0.0204	513	0.0210	0.0414(3)
1972-73	1,688	0.0524	329	0.0102	121	0.0038	0.0664(2)	284	0.0097	487	.0165	0.0262(3)
1973-74	1,862	0.0555	369	0.0110	81	0.0024	0.0689	311	.0080	405	0.0104	0.0184
1974-75	1,573	0.0451	317	0.0091	84	0.0024	0.0566	699	.0220	293	0.0092	0.0312
1975-76	1,460	0.0403	295	0.0081	71	0.0020	0.0504	531	.0182	215	0.0074	0.0256
5-Year Total or Average	8,088	0.0488	1,577	0.0095	437	0.0026	0.0609	2,322	0.0156	1,913	0.0128	0.0284
1976-77	1,465	0.0391	298	0.0079	74	0.0020	0.0490	566	0.0170	132	0.0040	0.0210
1977-78	1,468	0.0381	303	0.0079	76	0.0020	0.0479	561	0.0158	52	0.0015	0.0173
1978-79	1,472	0.0366	304	0.0076	76	0.0019	0.0461	713	0.0195	0	0	0.0195
1979-80	1,474	0.0355	306	0.0074	78	0.0019	0.0448	632	0.0168	0	0	0.0168
1980-81	1,509	0.0352	315	0.0074	82	0.0019	0.0445	818	0.0211	126	0.0032	0.0243
5-Year Total or Average	7,388	0.0368	1,526	0.0076	386	0.0019	0.0464	3,290	0.0181	310	0.0017	0.0198

1) Tax Rate set @ $0.067
2) Tax Rate set @ $0.069
3) Tax Rate set @$ 0.017

TABLE 8

SUMMARY OF TAX RATES, WATER CHARGES AND RESERVE BALANCE

-Full Construction Program
-Financed From Available Bonds and Current Revenues
-Service Area Tax Rate and Basic User Charge Held at 1971-72 Levels
-County-Wide Tax Rate Limited to 1971-72 Level
-Treated Water Surcharge at $35 Per Acre-Foot

				Flood Control Zone Taxes				
Year	County-Wide Tax ($/$100)	Service Area Tax ($/$100)	Basic User Charge ($/A/F)	NW Zone ($/$100)	C Zone ($/$100)	E Zone ($/$100)	Annual Construction Reserve ($)	Cumulative Construction Reserve ($)
1971-72	.0670	.0170	30.00	.0002	.0023	0027	317,000	4,364,000
1972-73	.0690	.0170	30.00	.0002	.0041	.0030	-25,000	4,339,000
1973-74	.0690	.0170	30.00	.0004	.0018	.0031	763,000	5,102,000
1974-75	.0566	.0170	30.00	.0004	.0016	.0027	83,000	5,185,000
1975-76	.0504	.0170	30.00	.0003	.0017	.0012	169,000	5,354,000
5-Year Average	.0535*	.0170	30.00	.0003	.0022	.0025		
1976-77	.0490	.0170	30.00	.0003	.0016	.0011	-3,822,000	1,532,000
1977-78	.0479	.0170	30.00	.0004	.0014	.0012	-3,508,000	-1,976,000
1978-79	.0461	.0170	30.00	.0006	.0013	.0011	198,000	-1,778,000
1979-80	.0448	.0170	30.00	.0005	.0014	.0011	-4,233,000	-6,011,000
1980-81	.0445	.0170	30.00	.0005	.0013	.0011	-335,000	-6,346,000
5-Year Average	.0464	.0170	30.00	.0005	.0014	.0011		

*Average for only last 2 years of 5-year period.

TABLE 9

SUMMARY OF CAPITAL IMPROVEMENTS
-Reduced Construction Program

Facility	Construction Period	Estimated Capital Cost*
Percolation Facilities Land Acquisition	1972-73 through 1975-76	$ 2,029,000
Penitencia Water Treatment Plant	1971-72 through 1973-74	5,271,000
Evergreen Pipeline	1971-72 through 1973-74	3,771,000
Mountain View Distributary	1973-74	447,000
Evergreen Pipeline Extension and Evergreen Reservoir	1976-77	2,807,000
Milpitas Pipeline	1976-77	1,533,000
Hetch-Hetchy Aqueduct Connection	1976-77	1,014,000
Penitencia WTP Expansion	1976-77 through 1977-78	3,978,000
		$20,850,000

* Adjusted to date of construction

TABLE 10

SUMMARY OF TAX RATES, WATER CHARGES AND RESERVE BALANCE
- Reduced Construction Program
- Service Area Tax Rate and Basic User Charge Held at 1971-72 Levels
- County-Wide Tax Rate Limited to 1971-72 Level
- Treated Water Surcharge at $35 Per Acre-Foot

				Flood Control Zone Taxes				
Year	County-Wide Tax ($/$100)	Service Area Tax ($/$100)	Basic User Charge ($/A/F)	NW Zone ($/$100)	C Zone ($/$100)	E Zone ($/$100)	Annual Construction Reserve ($)	Cumulative Construction Reserve ($)
1971-72	.0670	.0170	30.00	.0002	.0023	.0027	317,000	4,364,000
1972-73	.0690	.0170	30.00	.0002	.0041	.0030	-25,000	4,339,000
1973-74	.0690	.0170	30.00	.0004	.0018	.0031	763,000	5,102,000
1974-75	.0566	.0170	30.00	.0004	.0016	.0027	83,000	5,185,000
1975-76	.0504	.0170	30.00	.0003	.0017	.0012	169,000	5,354,000
5-Year Average	.0535*	.0170	30.00	.0003	.0022	.0025		
1976-77	.0490	.0170	30.00	.0003	.0016	.0011	-3,509,000	1,845,000
1977-78	.0479	.0170	30.00	.0004	.0014	.0012	-3,172,000	-1,327,000
1978-79	.0461	.0170	30.00	.0006	.0013	.0011	579,000	-748,000
1979-80	.0448	.0170	30.00	.0005	.0014	.0011	548,000	-200,000
1980-81	.0445	.0170	30.00	.0005	.0013	.0011	469,000	269,000
5-Year Average	.0464	.0170	30.00	.0005	.0014	.0011		

*Average for only last 2 years of 5-year period.

RECOMMENDATIONS

Studies which have provided the basis for this report indicate that in order to effectively manage the water resources of the County to the benefit of all residents, the District should continue to levy groundwater charges on all water extracted from the groundwater basin within the District's Zones W-2, W-3.1, W-3.2 and W-3.3.

Section 26.7 of the District Act currently requires that the groundwater charge in any year shall not exceed a fixed and uniform rate of $8.00 per acre-foot for agricultural water, and $30.00 per acre-foot for non-agricultural water. These rates are reasonable from a resources management point of view and are sufficient to provide the required revenue to operate and maintain the District's existing facilities and to construct, operate and maintain those additional facilities that will be required through 1975-76. Beyond 1975-76, modifications will be necessary relative to the financing of new facilities, including possible increases in water charges and tax rates. The magnitude of such increases, if any, will be dependent upon the specific construction schedule adopted in ensuing years by the Board of Directors.

Therefore, it is recommended for the year 1973-74 that the groundwater charge for agricultural water extracted from the groundwater basin within Zones W-2, W-3.1, W-3.2 and W-3.3 be continued at $8.00 per acre-foot, and that the groundwater charge for water extracted for non-agricultural uses be continued at $30.00 per acre-foot.

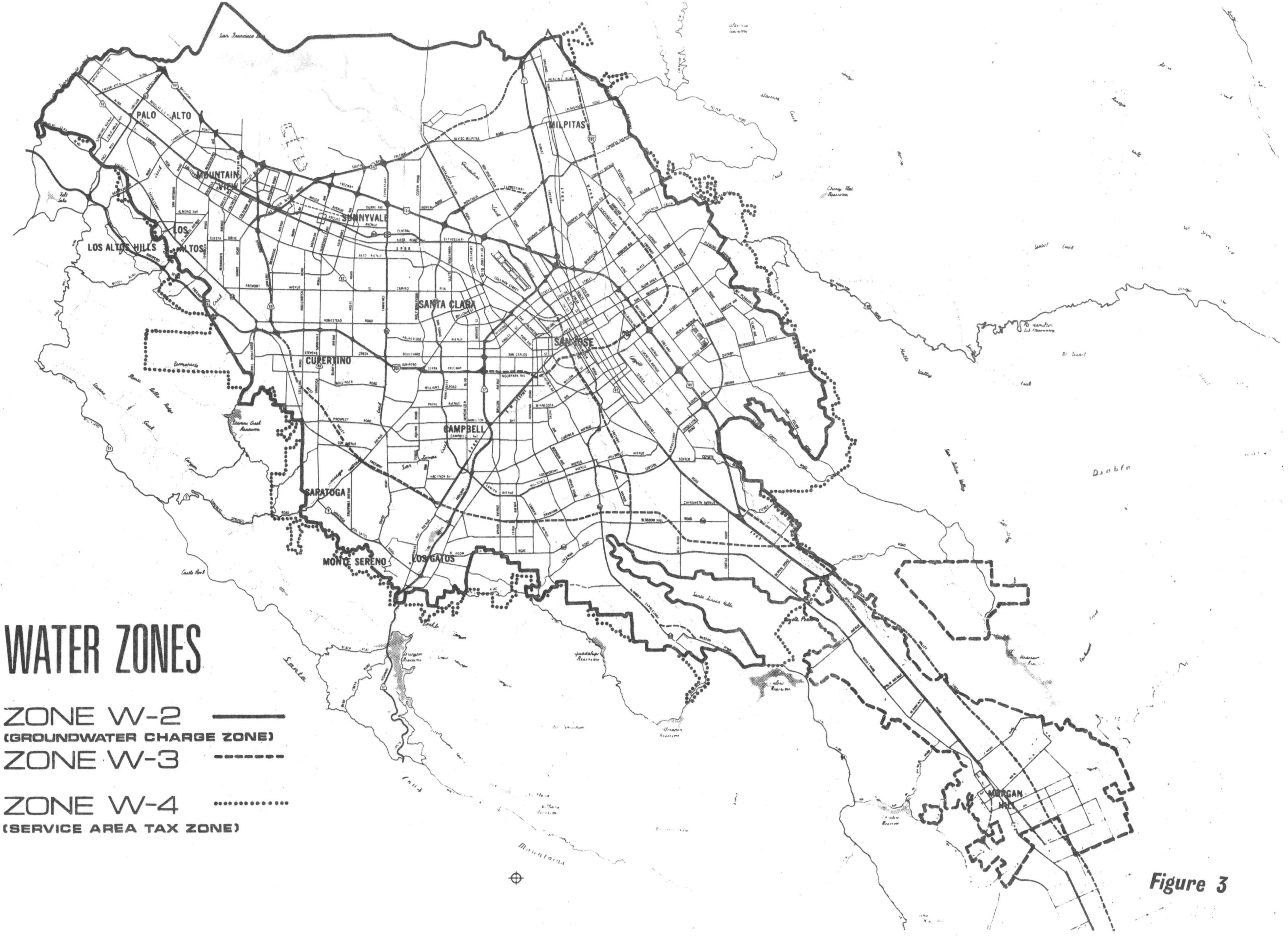
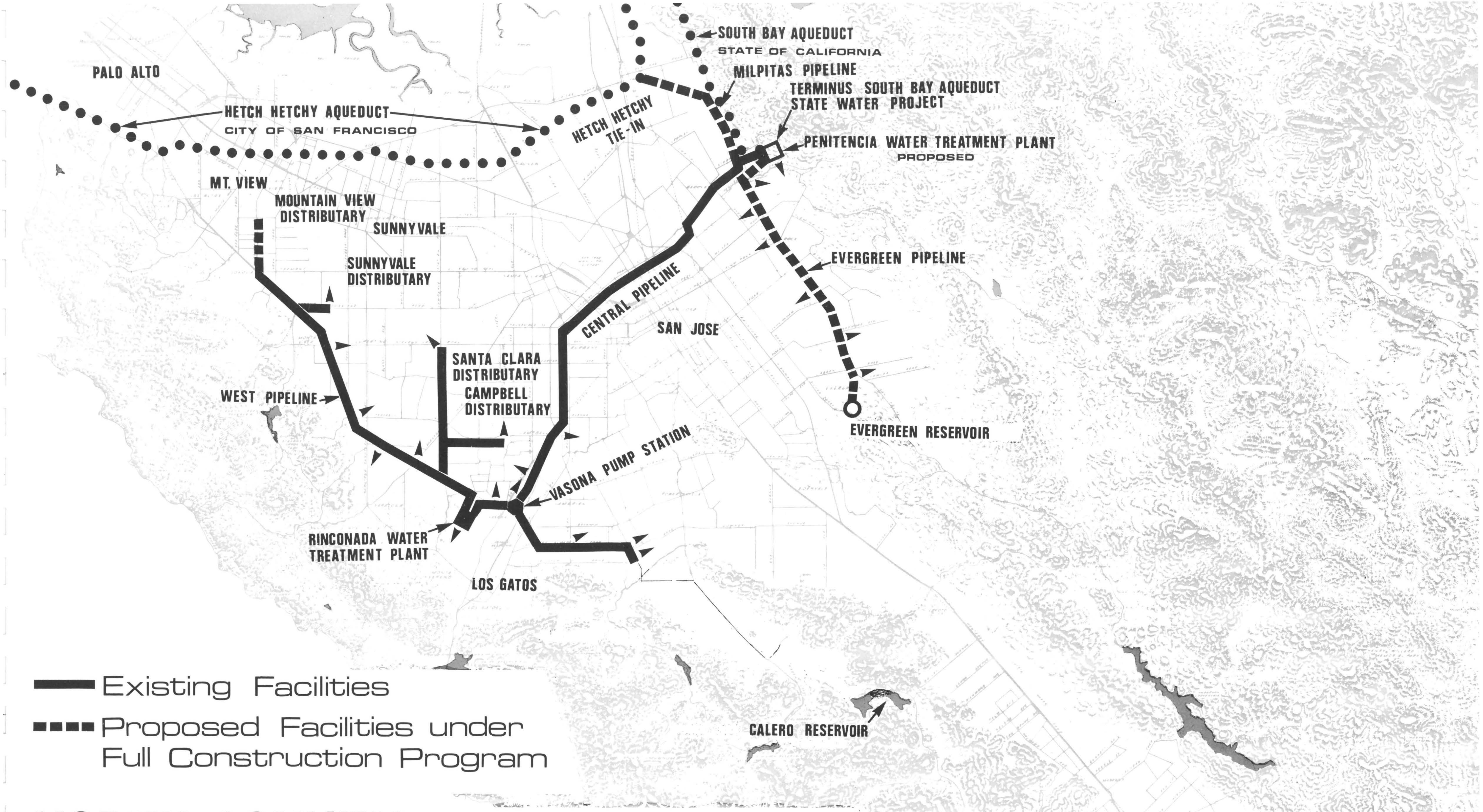
WATER ZONES
ZONE W-2
(GROUNDWATER CHARGE ZONE)
ZONE W-3
ZONE W-4
(SERVICE AREA TAX ZONE)
PALO ALTO
MOUNTAIN VIEW
MILPITAS
SUNNYVALE
LOS ALTOS
LOS ALTOS HILLS
SANTA CLARA
SAN JOSE
CUPERTINO
CAMPBELL
SARATOGA
MONTE SERENO
LOS GATOS
MORGAN HILL
Diablo

Figure 3



NORTH COUNTY TREATMENT & DISTRIBUTION FACILITIES

Figure 4